DECISION RECORD

Reference: Environmental Assessment (EA) for Grazing Authorization, NM-066-98-124

Decision: It is my decision to authorize the issuance of a ten year grazing permit to Robert Jolley for the Bureau of Land Management grazing allotment #65074. The permit will authorize 145 cows yearlong at 74% Federal range from March 1 to the end of February, for 1283 Animal Unit Months (AUM's). Any additional mitigation measures identified in the environmental assessment impacts sections of the referenced EA have been formulated into stipulations, terms and conditions.

Due to comments received from the New Mexico Natural History Institute and the Wildlife Management Institute in regards to establishing a rest rotation system,
a meeting with the permittee was conducted. As a result, the proposed action described within the EA is amended as follows and will be established as a term and condition of the permit.

A. Proposed Action: Existing situation)

To authorize the grazing permit on the Robert Jolley allotment #65074 for 145 AU's at 74% Federal range. Specifically, to authorize a grazing permit for 145 cows (1283 AUM's) from March 1 to the last day of February of each year., and;

*Continue current livestock management practices.

* and as a term and condition of the permit, implement a pasture rest rotation system that will allow one of the five shinney oak pastures growing season rest (May 1 - Sept.30) each year.

If you wish to protest this proposed decision in accordance with 43 CFR 4160.2, you are allowed 15 days to do so in person or in writing to the authorized officer, after the receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this proposed decision will become the final decision of the authorized officer without further notice, in accordance with 43 CFR 4160.3. A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final, is provided for filing an appeal and petition for the stay of the decision, for the purposes of a hearing before an Administrative Law Judge (43 CFR 4.470.).

The appeal shall be filed with the office of the Field Office Manager, 2909 West Second, Roswell, NM, 88201, and must state clearly and concisely your specific points.

Signed by T. R. Kreager — 8/9/99
Assistant Field Manager — Date

ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION

ALLOTMENT 65074

EA-NM-060-98-124

MAY 1999

U.S. Department of the Interior
Bureau of Land Management
Roswell Field Office
Roswell, New Mexico

Environmental Assessment for Grazing Allotment 65074

I. Background

.

A. Introduction

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit on Allotment 65074

The scope of this environmental assessment is limited to the effects of issuing a new grazing permit on Allotment 65074. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project-specific NEPA documents as they are proposed.

B. Purpose and Need for the Proposed Action

The purpose of issuing a new grazing permit would be to authorize livestock grazing on public range on Allotment 65074. The permit would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, and 4130.3-2.

C. Conformance with Land Use Planning

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

D. Relationships to Statutes, Regulations, or Other Plans

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

II. Proposed Action and Alternatives

A. Proposed Action: (Existing Situation)
To authorize the grazing permit on the Robert Jolley allotment # 65074 for 145 AU's at 74% Federal range. Specifically, to authorize a grazing permit for 145 cows (1283 AUMS) from March 1 to the last day of February of each year., **and;**

*Continue current livestock management practices.

B. No Permit/Lease authorization alternative:
This alternative, if selected, would be to not issue a new grazing permit for the Robert Jolley allotment #65074. No grazing would be authorized on federal land under this alternative..

III. Affected Environment

General Setting

Allotment #65074 is located in Chaves County, about fifteen miles east of Hagerman. The allotment is made up of seven pastures ranging from approximately two to three sections in size. This allotment consists of 7283 acres of Federal land, 2,483 acres of State Land, 1280 acres of private land and 222 acres of uncontrolled. Currently this allotment is categorized as a "I" or Intensive Management allotment. This allotment is a Section three allotment at 74% public land.

The southern pastures on this allotment are relatively flat, in a gravelly range site, with mesquite, three-awns, fluffgrass, black grama and bush muhly grasses. As you move north you transition to the shinnery oak dune range site.

The primary features in the shinnery oak dune community are topography influenced by aeolian and alluvial sedimentation on upland plains forming hummocks, dunes, sand ridges and swales and the presence of shinnery oak.

This is a unique community type found primarily below the Llano Estacado or Staked Plains, in an area known as Mescalero Sands. It lies in the Canadian Plains and Southern Desert ecosystem between the elevations of 4,100 feet and 4,300 feet. The topography is gently sloping and undulating sandy plains, with moderate to very steep hummocky dunes of up to ten feet and more in height scattered throughout the area. Some of the dunes are stabilized with vegetation, while a number of them are unstable and shifting. Dune blowouts with shinnery oak and bluestem, either isolated or in dune complexes are common in this community. Annual precipitation for this region averages 12 -13 inches.

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment #65074; Prime/Unique Farmland, Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, water quality,

floodplains, Areas of Critical Environmental Concern, and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage.

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

A. Affected Resources

1. Soils: There are five primary soil units on this allotment; the Faskin-Roswell association, the Roswell-Jalmar association, Tencee association, Faskin and Simona association.

Faskin-Roswell association

Soils are 50% Faskin sandy clay loam, 30% Roswell loamy fine sand, and 20% less extensive soils. The Faskin soil is deep and well drained. Permeability of this soil is moderate, available water capacity is high, runoff is medium, water erosion is moderate, while the hazard of soil blowing is very high.

Roswell-Jalmar association.

Soils are 60% Roswell fine sand, 25% Jalmar fine sand and 15% less extensive soils. These soils are deep, excessively drained. Permeability of the soil is rapid, available water capacity is 3 to 4 inches, runoff is very slow. water erosion is slight and soil blowing hazard is severe.

Tencee association

Soils are composed of gravelly loam, underlain with caliche and pebbles and cobblestone. The soils are well drained very shallow to indurated caliche. Permeability is moderate, available water capacity is 1 to 3 inches, runoff is medium, water erosion is moderate and soil blowing hazard is slight.

Faskin fine sand

Basic same soil characteristics as Faskin soils described above.

Simona

This series consists of well drained soils that are very shallow to shallow to indurated caliche. Permeability is moderately rapid, runoff is slow, water erosion is slight, while soil blowing is severe.

2. Vegetation:

The primary ecological (range) sites on this allotment are Deep Sand CP-2, Gravelly SD-3 and Shallow sandy SD-3. The Deep Sand CP-2 community is a unique ecological area dominated by tall and mid-grasses. In many areas, the shinnery oak community has shifted from a dominant sand bluestem/little bluestem/hairy grama grassland with varying amounts of shinnery oak, sand sage and yucca to a community dominated by sand dropseed, red and purple three-awn and hairy grama, with increasing annual forbs, shinnery oak, mesquite, sand sage and yucca. The Gravelly SD-3 site is dominated by grama grasses, with three awns and tridens. Shrubs common to this site include; creosote bush, catclaw mimosa, and yucca. Associated species found are range ratany, snakeweed, mesquite, cholla cactus and burrograss. The Shallow sandy SD-3 range site comprises predominately black grama, with lesser amounts of plains bristlegrass, sand dropseed, bush muhly, threeawn and fall witchgrass. .Shrub species include, mesquite, creosote bush, mimosa and javalinabush which invade under continuous grazing.

The RMP/EIS established resource objectives for the various plant community types.
Refer to the attached Data Summary Tables (Attachment #1) which depict the allotment community average as it relates to the Desired Plant Community objectives for the Shinnery Oak Dune community as well as the Grassland and Mixed Desert shrub Communities. The percentages of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather conditions, past resource uses and the potential of the site.

The field review reflects the grass component is dominated by bluestems, threeawns, dropseeds, black and hairy grama and a lesser amount of sand paspalum and fall witchgrass; the shrub component is dominated by shinnery oak, sand sage, yucca and some mesquite; the forb component is comprised of a variety of both annual and perennial species.

3. Wildlife:

This allotment is on the fringe of the Caprock Wildlife Habitat Area (WHA). The Caprock WHA provides diverse habitat for more than 54 birds species, 33 species of mammals, and 36 species of reptiles and amphibians.

Raptors that are frequently associated with the vegetation types on this allotment are the red-tailed hawk, swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the american kestrel.

Game bird species in this areas include the lesser prairie chicken, scaled and bob white quail, and the mourning dove.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-horned owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, horned lark, and other passerine birds.

At least 33 species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Two big game species that occur on the allotment are pronghorn antelope and mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

4. Threatened/Endangered Species

There are no known federally threatened or endangered species occurring within the proposed action area.

Special Status Species:

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document. Candidate species and State listed species do not receive protection under the ESA until proposed. However, within the act and under BLM policy the bureau has an obligation to ensure actions do not contribute to the need to list these species.

There are several Federal Candidate species that may occupy or utilize the area. These include the swift fox, lesser prairie chicken, and the mountain plover. For a detailed description of the range, habitat and potential threats to the swift fox and the mountain plover, refer to the Biological Opinion (AP11-38) in the Roswell RMP.

Dune Sagebrush Lizard

The dune sagebrush lizard is listed by the New Mexico Department of Game and Fish as Endangered, Group 2 and by the U. S. Fish and Wildlife Service as a Category 2, Notice of Review species. The dune sagebrush lizard only occurs in the southeastern corner of New Mexico and the western region of Texas. Within that range its habitat is restricted to active sand dunes and their peripheries (Degenhardt and Jones 1972). Shinnery oak is the dominate plant species that surrounds the top edge of the active sand dune, with a small composition of

grasses inside the blowout area.

During 1991 a study was begun to examine the effects of the removal of shinnery oak on lizard habitat. Through five years of research it was demonstrated that there were 70%-94% fewer lizards in treated pastures as compared to non-treated pastures.

Lesser Prairie Chicken

Recently a petition was filed with the U. S. Fish and Wildlife Service (FWS) to list the prairie chicken as threatened. On June 1, 1998 the FWS announced a finding for the petition. After review of all available scientific and commercial information, the Service finds that listing this species is warranted but precluded by other higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. The lesser prairie chicken is added to the Service's candidate species list.

In southeastern New Mexico, lesser prairie chickens exist in the shrub-dominated High Plains Bluestem Subtype by using mixed stands of tall grass and shinnery oak.

Male prairie chickens visit or establish booming grounds (leks) from early March to late May, with the peak booming activity occurring around the middle of April. Booming grounds can be found in mesquite shortgrass, shinnery oak grasslands, shinnery oak dunes, abandoned oil/gas pads, pipelines and roads. The basic requirement for lek sites is visibility of the immediate surroundings (shortgrass and topography)..

Female prairie chickens prefer range in excellent condition for nesting. In areas of shinnery oak, nesting studies (Copelin 1963, Riley 1978) indicate that these birds prefer shinnery oak rangeland habitat dominated by mid and tall grass species. Wisdom (1980) demonstrated that nesting success was enhanced by the presence of tall, wide clumps of sand bluestem, which are found in a few near-climax areas in the shinnery oak-grassland, while areas devoid of sand bluestem were not highly conducive to nesting success. In areas where sand bluestem is scarce, little bluestem apparently serves as an acceptable substitute Merchant (1982). Riley et al. (1992) found that most successful nests occurred where basal composition of sand bluestem was greater and the height of vegetation above successful nests averaged 67 cm, while height of vegetation above unsuccessful nests averaged 35 cm. Copelin (1963) found that the most successful nests were placed between clumps of grass residue left from the previous year's growth that provided overhead cover.

Brooding areas are often within habitats which are in lower seral stages usually having a high proportion of bare ground and annual forbs (Riley et al. 1992, Jones 1963).

Food requirements vary among the seasons. Prairie chickens rely heavily (97%) on forbs and other green plant material during the spring and invertebrates in the summer. The early fall diets consist of invertebrates and green plant material, while winter diets consist of mast from shinnery oak.

Above is a general description of prairie chicken habitat requirements. As with most wildlife species, especially upland game birds, precipitation plays a large role in population fluctuations and habitat conditions. Precipitation patterns have fluctuated drastically for the last twenty years. During the middle eighties precipitation was above normal and chicken populations responded very well. For the exception of two years, precipitation has been well below normal during the 1990's.

Population Monitoring Data

The Roswell Field Office has actively monitored prairie chicken booming grounds, population trends and habitat since the early seventies. Historically in New Mexico, the LPC occupied most of the eastern plains. However, numbers and occupied range of the species are much reduced since pre-settlement times; apparently in response to prolonged heavy grazing and brush control in combination with the great drouths of the 1930's and 1950's. It has been reported that currently the LPC occupies approximately one half their original range in New Mexico.

Since the early 1970's LPC populations have fluctuated up and down with the highest period occurring during the middle 1980's. On this specific allotment there have never been any lek sites found.

5. Livestock Management:

Mr. Jolley has had this allotment a year and is in the process of making ranch improvements. He is currently running a cow-calf operation with a herd of 70 cows, less than half his licensed number. He is considering implementing a pasture rotation grazing system after he has completed the improvements In shinnery oak dominated pastures livestock will be removed during the period that shinnery is toxic, normally mid March and April, to prevent livestock loss. Existing fences and water pipelines aid in management of livestock on the allotment.

6. Visual Resources:

This allotment is in the Class **IV** Visual Management Area. The Class **IV** rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Air Quality:

The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

8. Recreation:

Recreational opportunities on the public lands are somewhat limited due to the limited access. The primary recreational activity occurring in this area is hunting. Mule deer, pronghorn antelope, and game birds such as quail and dove are taken during hunting seasons set by the New Mexico Department of Game and Fish. Off Highway Vehicle designation for public lands within this allotment are classified as “Limited” to existing roads and trails.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soils:

The permitted use as described in the proposed action is not anticipated to have any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

Changes in vegetative ground cover is often linked to the amount and timing of precipitation events. This assessment is based on the assumption that the area will receive at least the long term average in precipitation both in timing and amount.

2. Vegetation:

The continuance of the permitted use at the current use levels authorized by the expiring lease is not anticipated to have any adverse impact to the current vegetative conditions. The vegetation will continue to be grazed and trampled by domestic livestock as well, other herbivores as well rabbits, rodents and insects. Under the proposed action , it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. The pastures will continue to get some deferment as outlined in the affected environment. Ecological condition and trend is expected to remain stable over the long term at this permit number.

3. Wildlife:
Under the proposed action, wildlife will continue to compete with domestic livestock for forage and browse. Cover, and other habitat requirements for wildlife will remain the same as the existing situation. With proper utilization levels there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

4. Threatened/Endangered Species

Special Status Species
Under the proposed action, there would be minimal impacts to the sand dune lizard due to the dispersal of livestock. Areas where there is a concentration of livestock (waterings and fence corners) the habitat may be of lower quality, but these areas are small in nature. Range improvements (pipelines) may enhance lizard habitat by creating open dunal areas that are usually bordered by shinnery oak.

Under the proposed action impacts to prairie chicken habitat are likely to continue, especially during drought conditions.

5 Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. The allotment would continue to be grazed in the same manner as it is currently.

6. Visual Resources:

The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Air Quality:

The impacts to air quality would not change from the current situation. A moderate amount of air quality degradation would continue.

8. Recreation:

Minimal impacts to recreational use are anticipated, since the public lands are land locked and there is limited access

.B. Impacts of the No Livestock Grazing Alternative.

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public lands would be permitted, livestock operators grazing lands adjoining Federal lands would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence these lands. Rangeland administrative emphasis would shift to issuing crossing permits to or from nonfederal land inholdings and resolving unauthorized use.

V. Cumulative Impacts

Under the proposed action there would be no change in the cumulative impacts since it does not vary from the current situation.

Under the change livestock management and/or numbers alternative there would be little change in the cumulative impacts. Livestock management facilities are anticipated to remain stable.

Roads might increase if additional land development increased. Livestock would continue to graze the land.

VI. Residual Impacts

Under the proposed action and the no grazing alternative there would be no change in the residual impacts.

VII. Mitigating Measures And/Or Permit/Lease Conditions

Under the proposed action and no grazing alternative no mitigating measures are required. Under the change livestock management and/or numbers mitigating measures outlined below may be required.

Under the proposed action, compliance with the grazing regulations (43 CFR Part 4100) will incorporated into the terms of the permit/lease.

VIII. Fundamentals of Rangeland Health

The fundamentals of rangeland health are basic components of healthy rangelands and guiding principles for the development of standards and guidelines for livestock grazing. The fundamentals are identified in 43 CFR §§4180.1 and pertain to watershed function, ecological precesses, water quality and habitat for threatened and endangered (T&E) species or other special status species. Based on the best available data and professional judgement, this EA addresses the fundamentals of Rangeland Health.

Field Office Staff Involvement/Review

John Spain - Rangeland Management Specialist
Rand French - Wildlife Management Biologist
Jerry Ballard - Outdoor Recreation Planner
Jim Schroeder - Watershed Specialist
Pat Flannary - Archeologist